

Appendix

Most of the values given in texts and tables of manuscripts in this Symposium Proceedings have been converted to metric (SI) units. Both nonmetric and metric units are shown in most instances, so that the relationships can be understood; however, metric prefixes, abbreviations and conversions are not well known to many people. Therefore, as a helpful adjunct to the symposium proceedings, we have included Tables 1 and 2, giving SI prefixes and symbols, and the conversion factors used in the manuscripts of this symposium.

Table 1. SI prefixes and symbols.

Exponent	Prefix	SI Symbol
10^{18}	exa	E
10^{15}	peta	P
10^{12}	tera	T
10^9	giga	G
10^6	mega	M
10^3	kilo	k
10^2	hecto	h
10	deka	da
10^{-1}	deci	d
10^{-2}	centi	c
10^{-3}	milli	m
10^{-6}	micro	μ
10^{-9}	nano	n
10^{-12}	pico	p
10^{-15}	femto	f
10^{-18}	atto	a

Table 2. SI conversion table.

To convert from	to	Multiply by ^a
acre (U. S. survey)	meter ² (m ²)	4.046873 E + 03
atmosphere (standard)	pascal (Pa)	1.013250 E + 05
British thermal unit (thermochemical)	joule (J)	1.054350 E + 03
BTU (thermochem.)/hr	watt (W)	2.928751 E - 01
BTU (thermochem.)/lb	joule/kilogram (J/kg)	2.324444 E + 03
degree Fahrenheit	degree Celsius	$t_{oc} = (t_{of} - 32)/1.8$
foot	meter (m)	3.048000 E - 01
ft ³	meter ³ (m ³)	2.831685 E - 02
gallon (U. S. liquid)	meter ³ (m ³)	3.785412 E - 03
grain (1/7000 lb avoirdupois)	kilogram (kg)	6.479891 E - 05
hectare	meter ² (m ²)	1.000000 E + 04
horsepower (electric)	watt (W)	7.460000 E + 02
inch	meter (m)	2.540000 E - 02
mho	siemens (S)	1.000000 E + 00
mil	meter (m)	2.540000 E - 05
mile (U. S. survey)	meter (m)	1.609347 E + 03
mi ² (U.S. survey)	meter ² (m ²)	2.589998 E + 06
pint (U. S. liquid)	meter ³ (m ³)	4.731765 E - 04
pound (lb avoirdupois)	kilogram (kg)	4.535924 E - 01
lbf/in ² (psi)	pascal (Pa)	6.894757 E + 03
ton (metric)	kilogram (kg)	1.000000 E + 03
ton (short, 2000 lb)	kilogram (kg)	9.071847 E + 02
yard ² (yd ²)	meter ² (m ²)	8.361274 E - 01

^a Notation: $yE \pm n = y \times 10^{\pm n}$